COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION

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September 13, 2010

Doug Smith
Chief, TMDL & Basin Planning Unit
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150

RE: County of El Dorado Department of Transportation Comments on Proposed Basin Plan Amendment and Final Lake Tahoe Total Maximum Daily Load (TMDL) Report

Dear Mr. Smith:

The County of El Dorado Department of Transportation (EDOT) appreciates the opportunity to review and comment on the Lahontan Regional Water Quality Control Board's (Lahontan) proposed Basin Plan Amendment (BPA) and the Final Lake Tahoe Total Maximum Daily Load (TMDL) Report. The adoption of the BPA and the TMDL, along with the upcoming amendments to the next municipal National Pollutant Discharge Elimination System (NPDES) permit, will bring about unprecedented changes in the way that storm water is managed in the Tahoe Basin. Therefore, EDOT feels it is imperative that Lahontan carefully consider all comments and feedback received from stakeholders throughout the TMDL process prior to moving forward with adopting the BPA and Tahoe TMDL.

In general, EDOT is supportive of the majority of the proposed amendments including the new approach of replacing numeric effluent limits with pollutant loads for the municipalities. However, EDOT does have comments, questions, and proposed language adjustments that we offered at the Public Hearing held on September 8, 2010, along with this formal comment submittal. Furthermore, EDOT is still seeking comments from other County Departments and respectfully requests that all timely subsequent comments be addressed prior to the November 8, 2010 Lahontan Board meeting.

As you know, one key EDOT concern involves implementing the new processes that will result from the TMDL. Given the difficult economic times that EDOT currently faces, understanding the implementation portion of the new regulations is critical in managing anticipated work loads so that EDOT and other County Departments may plan accordingly in order to continue to remain in compliance. Finally, because it was announced at the September 8, 2010 Board Meeting that the proposed changes to the numeric effluent limits (Table 5.6-1, BPA) will not be adjusted because they were not addressed in the environmental document, EDOT recommends that Lahontan re-circulate the environmental document to include the changes, as originally proposed, so that the BPA can proceed in its entirety, allowing numeric effluent limits to be replaced by pollutant loads for discharges to surface waters and to infiltration systems.

EDOT is committed to continuing its role as a key player in helping to protect Lake Tahoe and will work conscientiously within its resources to remain doing so. Again, we appreciate the opportunity to participate in the TMDL process and we look forward to your responses to our comments and questions. If you have any questions on this submittal please don't hesitate to call me at 530-573-7910.

Sincerely,

Steve Kooyman, P.E.
Supervising Civil Engineer
County of El Dorado Department of Transportation – Tahoe Engineering Unit

Enclosure

Pc: Norma Santiago, Supervisor, District V
Jim Ware, EDOT
Russ Nygaard, EDOT
Bob Slater, EDOT
Penny Stewart, CTC
Paul Nielsen, TRPA
Robert Erlich, City of South Lake
Bob Costa, Placer County
Leslie Case, Caltrans

TMDL/BPA County of El Dorado Comments

September 13, 2010

July 9, 2010 Basin Plan Amendment Notice

Cover Letter. Number 3 is missing.

Cover Letter. Number 5. – Based on recent developments regarding the current effluent limits, it is County of El Dorado's (County) understanding that the numeric effluent limits for storm water discharges to infiltration systems will remain within the Basin Plan. If the effluent limits remain, the County would like to clarify several issues: 1) Within the second paragraph there is a statement about the interactions of surface stormwater effluent to ground water, "*Phosphorus is generally associated with sediment and is unlikely to pass into groundwater through the soil column.*" Within the last paragraph there is the statement regarding surface water to groundwater separation, *"In the event there isn't sufficient separation between infiltration systems and groundwater levels, the Basin Plan ensures water quality protection by stating that when the separation between infiltration systems and groundwater is less than five (5) feet, discharges may be required to meet effluent limits for discharges to surface waters."* Is the soil column equal to the five (5) foot separation limit throughout the Tahoe Basin? Or will the discharger be allowed to infiltrate directly without pre-treatment into ground water pursuant to the individual site and soil conditions which might afford a reduced separation within the soil column?

Cover Letter. Section 7 states that *"The Lake Tahoe TMDL provides these agencies the flexibility to individually prioritize load reduction actions and to consider a variety of design storms for planning sub-watershed or catchment scale activities and project to collectively achieve the load reduction requirements."* Though this is discussed in the BPA, the use of the PLRM is required for the pre-project baseline loads, while the 20 year, 1 hour design storm is used for storm water treatment requirements. Please clarify this statement as it relates to the TMDL requirements for municipalities versus non-municipalities with respect to the BPA and current NPDES permit.

Page 8. 3rd paragraph under the implementation plan discusses the tools developed by the Lahontan Regional Water Quality Control Board to quantify, track and account for pollutant loads associated with Urban Runoff. These tools include the PLRM (continuous simulation), Road RAM, BMP RAM, and the LCCP accounting and tracking database.

a.) County has estimated that learning, populating, collecting, tracking and reporting the information as proposed from the beta versions of the tools will require, at a minimum, 2 full time positions, which are currently unfunded. We understand that Lahontan under the direction of the EPA are still refining the tools, therefore, we would like to receive some assurances from Lahontan within the BPA document that other assessment tools already developed by implementing agencies can be used in-lieu of the tools being developed by Lahontan. For instance, the County has contributed a significant investment in the development of several BMP and Road tracking tools to collect the referenced information, which provides the County with an equivalent or superior product containing

accurate information more efficiently and at a lower expense than the current beta versions of the Lahontan BMP RAM and Road RAM tools. The County does not expect to cease the current methods we have been developing and investing County funds in for many years; however we will be amenable to adapt certain data fields to collect necessary information in order to comply with the reporting requirements, which will not increase the level of effort above and beyond the current County funding available.

As stated previously, the County requests continued use of its own BMP and Road Assessment database, making changes to the reporting output to match the needs of Lahontan as well as TRPA commensurate with the Stormwater Program Progress Measures for Fine Sediment, Phosphorous, and Nitrogen without increasing the level of effort and costs above the current County NPDES Stormwater program.

Questions: Therefore, will the BPA and subsequent associated NPDES permits require only the Lahontan developed tracking tools as part of the requirements for use as part of a compliance program? If so, then how does the Water Board intend to help fund the continued development, calibration, training, maintenance, and management to implement said tools above the current level of County Stormwater Program funding within the current NPDES Permit?

b.) The County understands that the PLRM was developed as a tool for project alternative analysis (SWQIC PLR Document) and is proposed to be incorporated into the TMDL as the preferred continuous simulation software. Although the hydrology appears sound, issues have been raised as to the accuracy of the meteorological information used (SNOtel) with respect to actual precip values in the form of rain, inability to model small storms (20 year, 1 hour convective type of storms), difficulty or inability for model calibration, lack in identifying surface water outfall distance (connectivity), issues with RAM score incorporation, use of Characteristic Runoff Concentrations (CRCs) and use of conveyance. As written, the BPA will require a continuous simulation model for the development of baseline loads and analysis. That said, it appears as if the PLRM (current continuous simulation model being developed by Lahontan) will be required as the preferred method to calculate the baseline loads and analysis.

Questions: Has Lahontan completed a sensitivity analysis on the PLRM as it relates to all the required variable parameter data fields? Was this tool created for the ease of tracking for the Water Boards TMDL purposes? Has Lahontan completed an economic analysis on the use of the PLRM in order to fully understand the sizeable financial costs associated to the jurisdictions? Will the use of this model be a requirement in the TMDL? Or will the decision on the modeling efforts to provide the necessary data for compliance remain with each jurisdiction?

The County would recommend that each jurisdiction have the flexibility for modeling stormwater in order to comply with the baseline load and load reduction analysis requirements. The output analysis will still provide the main load reduction data for each defined catchment or watershed pursuant to the crediting program for Fine Sediment, Phosphorous, and Nitrogen, however, the means

and methods used to complete this main dataset should remain with the jurisdictions.

c.) The RoadRAM is being offered as a means to quantify, identify risk / load, characterize road condition and track data for TMDL compliance. The input parameters include varying levels of information to characterize the road surface. The Center for Water Protection (CWP) study (Law et al, 2008) is cited as the main reference with CWP modeled data directly input into the PLRM. The County is concerned that the CWP study did not measure a water quality benefit, instead they simply modeled a benefit; and no other study completed to date, that the County is aware of, has been able to measure a direct water quality benefit from sweeping. Current modeling efforts within the PLRM assumes various estimates for sweeping which is rated as one of the best BMP's for pollutant load reduction benefits. This appears to be contrary to the current state of knowledge on this topic and the County does not believe this is supported by other studies nationwide. Sweeping is a tool needed for abrasive management and construction site cleanup, but its use as a mobile water quality BMP, that will be so heavily relied upon for load reduction crediting, has not been fully demonstrated nor its benefits to water quality recognized.

The Road RAM protocols require the measurement of the characteristics of varying road conditions and determines that dirtier roads have dirtier runoff and cleaner roads have cleaner runoff. The logic here appears to be intuitive, however, the County is concerned that there is still much to be understood on this subject with respect to the direct relationship of changing road conditions with an actual measured resultant water quality benefit. It appears that the knowledge of this practice is not very well understood and its benefits are uncertain to water quality especially within the Tahoe Basin during winter months. Therefore, the County believes that the current beta version of the Road RAM efficiencies related to sweeping are pre-mature and should be fully evaluated for actual water quality benefits gained if this tool will be required within the BPA and subsequent NPDES permit. The financial impacts associated with the planning, data collection, management, sweeping and tracking is extremely high.

This is one subject whereby the County would recommend caution with respect to requiring a means and methods to achieve water quality compliance without further analysis on the actual measured water quality benefits and the potential implicated increased costs and level of effort to the regulated jurisdictions. As a reference on this topic, the California Commission on State Mandates has held that large portions of the San Diego County Large Municipal Stormwater Permit exceeded the requirements of federal law and constituted unfunded state mandates. According to the decision, some portions of the San Diego permit are unfunded state mandates, meaning if the Legislature does not appropriate funding for the programs, the counties and cities subject to the permit are not required to implement them. These items include sweeping and sweeping reporting. Therefore, the County believes that the BPA and related documents should not specify how responsible parties will achieve needed reductions. The current verbiage within the implementation plan, urban runoff section of the BPA

states, "*The Lake Clarity Crediting Program, which is intended to be incorporated into the NPDES permits, provides a system of tools and methods to allow urban jurisdictions to link projects, programs, and operations and maintenance activities to estimated pollutant load reductions.*" Albeit the language does not explicitly state an on the ground means and methods for compliance, the proposed tools and methods being developed by Lahontan and partner agencies, which will be incorporated into the subsequent NPDES permits, will require extensive data input related to changing the characteristics of the road (via sweeping) without full justification on actual load reduction benefits, hence dictating a method to achieve the means of compliance.

Inquiries: Please indicate how Lahontan will rectify the implicit language within the system of tools whereby the data input related to road conditions will result in a direct water quality benefit. Furthermore, please provide the data being used to support the tool assumptions.

Questions: Does Lahontan believe that the characteristics of the road can be effectively changed at a reasonable cost to result in a tangible water quality benefit? If so, what documentation is there to support sweeper equipment type, frequency, duration that will provide a direct measured water quality benefit?

d.) The County understands that the tools have not been developed for tracking stream channel erosion, atmospheric deposition and the forested uplands. These areas have associated projects that receive a large majority of the funding for environmental improvements (~85% of EIP budget). Most of them have impacts (temporary and permanent) that are difficult to determine. Stream restoration projects are being completed using some water quality funding that have an unknown environment benefit with potential for negative impacts during construction due to the large temporary disturbance required. The Forestry activities being conducted require temporary roads, SEZ, and soil disturbance to implement pursuant to the current Basin Plan, TRPA Regional Plan, and Forestery Plan. Forest management agencies own beaches, harbors, lake front property with associated impervious surfaces, recreational areas, marinas and hundreds of miles of unpaved roads. County believes that a large amount of the loading is occurring from these activities based on the TMDL Land Use models yet no requirement is being made to hold these agencies and projects accountable within the TMDL crediting and tracking framework.

Inquiries: Please explain and provide the justification of the loading numbers from a pure hydrologic analysis for these non-NPDES Permit Land Owners (i.e. WS run-off calculations).

Questions: Why are these activities not being evaluated and tracked to a similar level as the urban jurisdictions?

Page 9. The fourth paragraph briefly explains the basis of the original load calculations. To that end, the Lake Tahoe Total Maximum Daily Load Technical Report refers to using Event Mean Concentrations (EMC) to determine the loads coming from the existing land uses within the

watersheds or catchments. The PLRM is now using Characteristic Runoff Concentrations (CRC) as the way of estimating loads from the Land uses.

Questions: How does this reconcile with the credit system, since the initial loads were based on EMC's? Will the credits be adjusted to the use of CRC's?

Page 9. In the sixth paragraph you mention that the LCCP is intended to be incorporated into the NPDES permit, including a system of tools and methods, etc.

Questions: Is Lahontan anticipating requiring the Local Jurisdictions to use the tools and methods that were created for the TMDL (BMP RAM, Road RAM, PLRM, etc.) into the new NPDES permit?

Page 10. In the first full paragraph, Lahontan states that *"The Regional Board may require forest management agencies to track and report load reduction..."* This seems very loose with limited consequence for non-compliance based on the large land ownership of these agencies and potential high loads during big events.

Questions: How is Lahontan planning to track and account for load reductions achieved by the forest management agencies?

Page 10. In the first sentence of the fourth paragraph, Lahontan states that *"the majority of fine sediment particle load from the atmospheric source is generated by the urban roadways."*

Inquiries: Please provide the citation for where this data came from.

Page 10 of the implementation plan and Section 9.1.2 of the Final TMDL includes a narrative for the atmospheric deposition component. This indicates that 50% of the Nitrogen and 15% of the total fine particulate load to Lake Tahoe is generated from the urban area. This narrative description assumes that by reducing the roadway dust and regulating jurisdictions NPDES permits this atmospheric component can be met. The following are some issues and associated questions raised as seen from the analysis assumptions:

Table 5.18-3. Total Nitrogen Load Allocations by Pollutant Source Category.

	Baseline Load		Milestone Load Reductions											Standard Attainment
	Basin-Wide Nitrogen Load (MT/yr)	% of Basin-Wide Load	5 yrs	10 yrs	15 yrs	20 yrs	25 yrs	30 yrs	35 yrs	40 yrs	45 yrs	50 yrs	55 yrs	60 yrs	65 yrs
Forest Upland	62	18%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Urban Upland	63	18%	8%	14%	19%	22%	25%	28%	31%	34%	37%	40%	43%	46%	50%
Atmosphere	218	63%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Stream Channel	2	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Basin Wide Total	345	100%	2%	3%	4%	5%	6%	6%	7%	7%	8%	8%	9%	9%	10%

a.) The total load reduction from the Forested Uplands is 18%, yet no reduction is needed from this source category and the focus assumes the local jurisdictions can reduce the load from the NPDES regulated portion.

Questions: What is the reasoning behind the local jurisdictions being required to reduce 50% of the load, while the forest watershed, which includes unpaved roads, restoration sites, ski areas and recreational trails, other disturbed lands, off road vehicles and logging operations, has 0%? Please supply the information and data to suggest that 0% reduction in this source category is needed from the forested uplands and what assumptions went into making this determination?

b.) The atmospheric component is 63% of the total Nitrogen baseline load with a required reduction of only 2%. The urban is 18% of the baseline load with a required reduction of 50%. The assumption put into these numbers seems skewed, especially based on the fact that there are no methods or options specified to reduce the fine particulates on the road. In the peer review by Patrick Brezonik, technical issue #5 questions whether watershed management will be sufficient to meet atmospheric load reductions as stated in the TMDL on pages 11-13. He also mentions that sweeping may help decrease atmospheric loadings, but more analysis needs to be completed. The Lahontan response was *"Although the Water Board cannot specify how responsible parties will achieve needed load reductions from urban areas, greater street sweeping frequency with efficient vacuum sweepers is expected."* This statement could be construed as direction for a method to achieve the means of compliance which has the potential to meet the California Commission on State Mandates ruling as an "Unfunded Mandate".

Questions: Are there other ways to change the road condition other than sweeping that the Board believes can achieve this requirement from the urban category? Is this technically or feasibly possible (please cite references)? What science is there to support the claim that street sweeping will have a significant benefit to atmospheric components resulting in a water quality benefit? Has Lahontan considered the other ancillary impacts to air quality from increased sweeping (i.e. added gas/diesel emissions, traffic control impacts on idling cars, added off-haul for material etc...)?

c.) The needed reduction for the urban category is 50%. Pg. 4.9-32, column 1, paragraph 4 states that *"69 percent of the Nitrogen deposition on Lake Tahoe originates locally."*

Questions: By locally, does that mean that the majority is coming from the urban upland source category or is it from a combination of all source categories? Can Lahontan please clarify what source category the atmospheric source is coming from and why the majority of the reduction can be accounted for by the urban component?

d.) The urban source category has 63 MT/yr and is being required to reach 50% attainment in 65 years for a total of 31.5 MT reduction or 9.1% of the Basin wide total. The atmospheric has 218 MT/yr and is being required to reach 2% attainment in 65 years for a total of 4.36 MT reduction, or 1.3% of the basin wide total. The urban has 18% of the load and 9.1% of the total reduction, while the atmospheric has 63% of the load and only 1.3% of the total reduction.

Questions: Being that 63% of the total nitrogen is contributed from the atmospheric category (of which the sources at this point are locally unknown), why does the urban category carry the burden in reducing loads that may be beyond their control, while the forested upland is exempt from this reduction? Please describe what information was used for these assumptions, provide data to support those assumptions and describe how the forested uplands are not included in the load reduction?

Page 11. In the Table, under the Schedule heading

Questions: Why would future SWMPs be required to be submitted six months prior to the new NPDES permit coming out, when the Jurisdictions won't know what the new permit would require? It seems to make more sense to require them to be updated six months after the new NPDES permit is adopted.

Page 12. First paragraph references using the *"Pollutant Load Reduction Methodology"* with no reference listed. The methods and results used to estimate the pollutant loads and the estimated percent reduction needed of said pollutant loads are outlined in the Lake Tahoe Total Maximum Daily Load Technical Report (February 2009). The load reductions that will come out of the Pollutant Load Reduction Methodology are based on changing maintenance practices and the characteristics of the roadways.

Inquiries: Please add the reports or documents that explain how the load reduction will be achieved to the list of references.

Page 12. First paragraph references using a *"continuous hydrologic simulation process"* to determine baseline pollutant loads. Since all baseline loads are to be reported as Mean Annual Totals, the County requests this requirement be removed. In addition, as it is written, this would only be required of the baseline loads calculation. It would be beneficial if the language was updated to include requiring the use of the same method for calculation of baseline and post project loads. Please note that the County, as part of its Pollutant Load Reduction Strategy, estimated all pre-project loads as Mean Annual Loads without the use of a continuous simulation model.

Questions: Please describe why, if the loads are to be reported as mean annual, a continuous hydrologic simulation process is proposed to be required to calculate baseline loads?

Page 24 – Stormwater Treatment Requirements. Clarify the municipality requirements and private parcel owner requirements. It seems it would be easier to understand if the requirements were broken out in this section into separate paragraphs calling out the specific requirements (i.e. **Municipal Jurisdictions and State Highway Department Requirements include**: **New development, re-development, and individual Best Management Practice effort Requirements include**: ...)

July, 2010 Proposed Water Quality Control Plan Amendments, Total Maximum Daily Load for Sediment and Nutrients in Lake Tahoe

1.) Section 6. 1st paragraph states that the numeric target is defined as 29.7 meters average annual secchi depth. This should be re-written to clarify that the target is to restore average annual clarity as measured from 1967-71. The average annual clarity based on the data from the period of record is 24.2 meters.

2.) Section 8

a. Table 8-1 shows a comparison of the annual average secchi depth (Sahoo et al. 2009). This table only has information for a limited amount of time (5 years) and does not include any recent data. The modeled vs. measured values are very different ranging about 1.4 meters on average. This was also commented on as part of the peer review analysis completed by Patrick Brezonik on July 25, 2009 as part of comment #3 and response PB-3.

Questions: Why is there no comparison between recent data (2005-2009) to check the validity and accuracy of this clarity model? Please include some updated comparative analysis to support this model.

b. Table 8-2 shows the modeled vs. measured trend for years 2000-2020 with no changes in current pollutant control efforts. The measured values are not included in this graph for year's post 2004. The model seems highly volatile in that the projected numbers for 2006-2009 vary from 5-7 meters each year. These are large variations and unlike anything ever seen in the historic secchi record.

Questions: Is there reasoning why the modeled vs. measured values were only completed on a 5 year dataset (2000-2005)? Has the model's utility been validated since this initial comparison? If so, EDOT would like to request that information.

3.) Section 11.3.1.

a. Page 7, under "Performance and Compliance Assessment and Reporting" - the first sentence states that *"Urban municipalities will be required to participate in the Lake Clarity Crediting Program, which provides a system of tools and methods to....."* The County does not recommend that each jurisdiction be 'required' to use all the tools created for this program (i.e. BMP RAM, Road RAM, etc.) more of required to provide Lahontan and TRPA the Progress Measure units each year within the annual Report for Fine Sediment, Phosphorous, and Nitrogen. Please provide us a template of the data Lahontan will require from the County so that the County can asses the level of effort and compatibility to our own dataset for future reporting requirements.

b. Page 7, same section, third paragraph - Lahontan states that, *"... shall use either the PLRM or an equivalent method approved by the Water Board... to estimate pollutant loading..."* County prefers this language to language found

elsewhere in the TMDL Report and Basin Plan Amendment that requires the use of a Continuous Simulation Model to calculate loads. There is substantial scientific evidence that suggests that a continuous simulation model may not be the best method to predict loads for the relatively small watersheds that EDOT has.

c. Page 8, in Table 11-1, under Schedule - Lahontan states that the SWMP and Baseline Loading Estimate must be complete no later than two (2) years after TMDL approval. The asterisk states that 'TMDL approval is the date that the USEPA approves the Lake Tahoe TMDL.' From what EDOT understands, USEPA approval could be up to two (2) years after Lahontan Board approval. This could potentially put these products almost three years out from today. Is this correct?

4.) Section 11.3.2. In the first complete paragraph on this page - Lahontan states that *"The Water Board and NDEP will track forest implementation partner activities to determine whether expected load reduction actions are being taken...."*

Questions: How does the Water Board intend to do this to make it transparent to all other parties that have specific targets? The County feels that the Forest Management agencies have a large role to play in load reductions to Lake Tahoe.

5.) Section 16.11 of the TMDL "Economic Considerations"

a.) The TMDL final report states *"The Porter-Cologne Act directs regulatory agencies to pursue the highest water quality that is reasonable, and one of the factors used to determine what is reasonable is economics. It is clear, though, that economic factors cannot be used to justify a result that would be inconsistent with the federal Clean Water Act or the Porter-Cologne Act. The Water Board is obligated to restore and protect water quality and beneficial uses."* Economic factors have to be taken into account when determining consistency with Clean Water Act or the Porter-Cologne Act goals. County staff believes that the restoration of Lake Tahoe is the obligation of all parties invested in Tahoe including Federal, State and Local governments. Given the reality of current funding, the anticipated cost of this program is projected to be far beyond what the County can reasonably obtain funding for, so inevitably the program will be constrained by funding allocations. The County will continue to implement this program within its means and financial constraints.

Questions: What level of non-compliance would be considered inconsistent with the Clean Water Act or the Porter Cologne Act?

b.) All of the requirements in the amendments to the TMDL could be funding constrained. The cost for this program has been estimated at about 1.5 billion in the urban source category of which approximately 200 million would be needed by the County in the next 15 years. The overall cost to meet standard attainment is 6.5 billion over the next 65 years. Discussions with Water Board staff regarding this have indicated that regardless of funding, these requirements will

remain the same for implementation and reporting. The Stormwater Financial Strategy Report conducted by the County has suggested that approximately 1 million dollars per year will be needed to meet future NPDES requirements for compliance alone. This estimate does not include project delivery or maintenance activities under the TMDL. The current stormwater financial strategy indicated that a property related fee is the best option for funding currently unfunded portions of the NPDES program. At $63/year, the revenue from the local taxpayer base could be $535,000 / year. To implement this fee the taxpayer base would have to approve the item by 50%+1 vote. The future of grant funds is currently uncertain and the implementation of a property related fee is uncertain as well. Failure to comply with NPDES rules will result in significant liability and potential penalties under federal and state laws. Local taxpayers and rate payers will bear the cost of litigation, penalties and damages associated with noncompliance.

Questions: In order to avoid potential failure during the implementation phase of the TMDL, has Lahontan considered a phased implementation plan based upon available funding?

c.) Annual operation and maintenance costs were estimated in the TMDL final report to be 6 million per year.

Questions: Please respond with the backup information to support this claim. Does this include any infrastructure replacement? Does this include advanced sweeping costs or increased BMP maintenance?

d.) In TMDL appendix B, the peer review comment from William M. Lewis dated July 9, 2009; states *"My overall concern about the implementation phase of source control is its enormous cost. Given the financial realities of the current economy, it might be good to have a companion document, of small size, outlining the results that could be attained for expenditures of 50 percent or 25 percent of the proposed expenditure. Thus, in the event of financial hardship, source control could proceed, and still be meaningful."* In the response, the Water Board stated *"The Water Board and NDEP estimate that the resources necessary to achieve required load reductions from the urban uplands will be roughly $100 Million per year for the next fifteen years. While the Water Board and NDEP acknowledge the challenge of dedicating such resources in the current economic climate, the magnitude of the commitment is similar to the amount spent during the past ten years of erosion control, stormwater treatment, and restoration efforts in the Tahoe Basin. The TMDL Implementation Plan requires each implementer to assess its baseline load and devise its own pollutant load reduction strategy to meet the load reduction requirements. Therefore, each implementer can weigh cost as a factor when choosing its load reduction actions for each year."* The County does not believe that the Water Board adequately addressed the comment offered by William M. Lewis. The fact that each implementer assesses its own baseline load and develops a pollutant load reduction strategy to meet requirements does not mean the funding will align with the plan. Implementers must inevitably weigh cost as a factor when choosing load reduction actions each year. Also, the urban uplands (those mainly responsible for TMDL

implementation) have never seen funding levels anywhere near $100 million / year from the EIP for Stormwater. At best the basin has received $20 million/year for Stormwater related EIP Projects. The current state of the economy is not paralleling the current TMDL implementation economic reality. Without financial contributions from partner agencies the program as proposed simply cannot be met. The County is not capable of generating those kinds of financial resources with its small taxpayer base.

Questions: Please state whether regulations will be lifted or the pollutant strategy extended during difficult financial times? Please revisit the above referenced comment by William M. Lewis and respond.

6.) Section 16.6.1.

a. Under Geology and Soils in the Environmental Checklist - Please explain why the letter *b) Result in substantial soil erosion or the loss of topsoil?* box was checked 'No Impact'. It seems that given Lahontan logic used in the Checklist of checking 'Less Than Significant Impact' for several other boxes, even though you are analyzing the impacts of implementing a Basin Plan Amendment, that the effect of your BPA will cause significant project implementation, which will significantly alter soils with a huge potential to cause erosion during excavation, trucking, etc. Just because a project complies with a Permit, does not mean that it does not have the ability to cause erosion.

b. Under Greenhouse Gas Emissions - Please explain what criteria was used for your projected increase in greenhouse gas emissions caused by project implementation as a result of the BPA that allowed you to determine that it was a 'No Impact' result.

References:

Law et al, Deriving Reliable Pollutant Removal Rates for Municipal Street Sweeping and Storm Drain Cleanout Programs in the Chesapeake Bay Basin, Center for Water shed Protection, 2008.